

**Before the
FEDERAL COMMUNICATIONS COMMISSION**

| | | |
|--|-----------------|-----------------------------|
| In the Matter of Modernizing the E-rate Program For Schools and Libraries |))) | WC Docket No. 13-184 |
|--|-----------------|-----------------------------|

Comments of the Texas Education Telecommunications Network

Contents

| | | |
|-------|--|---|
| I. | INITIAL COMMENTS | 1 |
| II. | BACKGROUND | 1 |
| III. | CONSORTIUMS - PARAGRAPHS #132, #171, #179 – 184, #190, AND #239 | 2 |
| IV. | FUNDING FOR BROADBAND CONNECTIONS - PARAGRAPHS #75, #173 AND #196 | 2 |
| V. | ENSURING SCHOOLS HAVE AFFORDABLE ACCESS – PARAGRAPHS #190, #28, #250 | 3 |
| VI. | IDENTIFYING RURAL SCHOOLS AND LIBRARIES – PARAGRAPHS #276-278 | 3 |
| VII. | WIRELESS COMMUNITY HOTSPOTS- PARAGRAPHS #319 - 323 | 3 |
| VIII. | ATTACHMENT A | 4 |

I. Initial Comments

Please accept these comments submitted under the auspices of the Texas Education Telecommunications Network ("TETN"). TETN is a cooperative of the Texas Education Agency and the twenty regional education service centers ("ESCs") in Texas.

TETN applauds the efforts of the FCC to ensure schools and libraries have affordable access to 21st Century broadband, to maximize the cost-effectiveness of E-rate funds, and to streamline the administration of the E-rate program.

II. Background

The twenty education service centers in Texas assist school districts in improving student performance and enable school districts to operate more efficiently and economically.¹ The ESCs are non-regulatory agencies, and under Texas law, have relationships with school districts solely in a collaborative and supportive manner. The ESCs created regional networks in 1994 to provide networking and technology services to school districts in their region as recommended in the Texas Education Agency Long-Range Plan for Technology. Currently the ESCs provide internet access and other technology services such as video conferencing, application hosting, learning management systems, etc. to over 900 school districts and charter schools in Texas.

Texas law encourages governmental entities to enter into agreements for the purpose of achieving efficiency in the accomplishment of governmental administrative functions². Therefore school districts are encouraged, but not mandated, to enter into cost-efficient service agreements with their ESCs.

¹ Texas Education Code, Chapter 8 Regional Education Service Centers

² Texas Interlocal Cooperation Act, Texas Gov. Code Section 781.001

The ESCs are involved in the E-rate program in a variety of ways depending upon the needs of their districts. Therefore the twenty ESCs may serve one or more roles such as being an E-rate service provider, being an E-rate consortium lead for their districts, or being applicants for certain eligible services. It goes without saying that the ESCs carefully, and with much attention, provide services to their districts in a manner that adheres to Commission rules.

III. Consortiums - Paragraphs #132, #171, #179 – 184, #190, and #239

TETN has filed a consortium application since the beginning of the E-rate program for Priority One telecommunication and telecommunication services for the statewide backbone connections. TETN supports gigabit connections among strategic cities in Texas using services from the Texas R&E network, Lonestar Education and Research Network (LEARN) and Level3. See map of the TETN Plus Network in Attachment 1. On behalf of the participating ESCs, TETN leverages economy-of-scale pricing for internet access that can be passed to school districts, and for high-capacity routes to support long distance learning and collaborative projects among school districts accessed through the R&E networks and commercial peering service³. Currently school districts with access to the TETN enjoy quality of connections to services such as Google, Netflix and Microsoft.

Since schools have the option of receiving services from their ESC, TETN's Block 4 slightly changes from year to year. The burden of confirming which schools are using the backbone and ensuring the LOAs are in place is very time consuming and has no real effect upon the funding request. The high-capacity routes cost the same regardless the number of schools that are connected to an ESC.

TETN makes the following recommendations to streamline consortium applications for the following services: digital transmission services, dark and lit fiber, internet access, and wireless internet access:

- A. Report consortium members by district level and calculate the discount on the basis of the district-wide average. Do not use a weighted average.
- B. Verify member site information only once during the life of a long-term contract.
- C. Verify LOAs only once during the life of a long-term contract.
- D. Adopt the "Evergreen Status" process for the life of contract similar to Rural Healthcare program. Rigorously review in Year 1 with sign-off on subsequent years barring any administrative or technical changes in requests.
- E. Reimburse long-term contracts after the Year 1 review using the BEAR Form and invoices.
- F. Employ strategies to reduce the length of the approval process. Designate dedicated reviewers who are trained on the unique nature of consortium applications to complete a review within a specified period.

IV. Funding for Broadband Connections - Paragraphs #75, #173 and #196

TETN strongly urges the FCC to prioritize the E-rate program on broadband deployment and on access to all instructional classrooms. TETN believes that funds should be identified and set aside for special construction charges (i.e. fiber wherever feasible) from a middle-mile aggregation location to the school or library. Lessons learned from successful BTOP projects clearly show communities in underserved areas will greatly benefit from a fiber build-out project to a school/library.

TETN supports the need to increase the E-rate cap until all schools/libraries have a minimum of 100 Mbps, and all instructional classrooms have access to their school's broadband connection.

³ Settlement-free peering refers to the voluntary interconnection of separate networks for the purpose of exchanging traffic freely between the users of each network for mutual benefit.

TETN supports the need of the FCC to increase transparency of E-rate spending and prices E-rate applicants pay for service. It is not necessary to burden the system with competitive bidding data but require applicants to provide more granular information on Attachment 21. TETN believes accurate data is essential and critical to determining whether the objectives of the ConnectEd initiative have been met.

V. Ensuring Schools Have Affordable Access – Paragraphs #190, #28, #250

TETN strongly recommends removing barriers that discourage participation in state R&E networks and that provides for different regulatory treatment for eligible services. TETN also recommends supporting connectivity to the R&E private backbone. As mentioned in Section III, TETN pays for access to LEARN and Internet2's peering services. Over one-half of TETN's shared internet traffic (i.e. 1.5 gig) traverses LEARN's commercial peering port and not TETN's two ISPs port connections. TETN cannot seek reimbursement for this quality of service and yet it sets the standard for the definition of digital learning connectivity in the 21st Century - low latency, low jitter and low packet loss.

State R&E networks are positioned to help support the goals of the NPRM. Specifically state R&E networks:

- A. have the expertise and experience as proficient and trustworthy stewards of special construction funding to successfully execute multiple build-out projects across a large geographical area,
- B. provide economy-of-scale purchasing power to support construction projects and maintain broadband infrastructure,
- C. maintain relationships with private sector businesses that deploy fiber to schools/libraries and that serve multiple business objectives of the community,
- D. have knowledge of their state's infrastructure to help identify the underserved schools/libraries and account for the status of connectivity in their State.

VI. Identifying Rural Schools and Libraries – Paragraphs #276-278

TETN agrees with the need to modernize the FCC's definition of "rural area." TETN supports the use of NCES codes as outlined in proposed rule **§54.505**. After performing a selective search of ten schools in Texas known to be in underserved areas but located in urban counties, TETN found the "district" NCES code to more accurately reflect the school's status, especially in regards to the schools' lack of access to urban connectivity and urban pricing.

VII. Wireless Community Hotspots- Paragraphs #319 - 323

While community hotspots is an issue normally reserved for individual school districts, TETN supports the idea of permitting students and the general public to receive E-rate funded Internet access offsite through wireless hotspots. Many school districts in Texas are struggling to provide after-hour internet use so all students have equitable access to technology. Leveraging E-rate supported infrastructure is one way to help provide students and their community with access until the time when all communities are served with affordable broadband. TETN supports the need to maintain current rules to reduce waste, fraud and abuse. The FCC should keep things simple and place the responsibility on the school to ensure capacity is available when needed.

VIII. Attachment A

